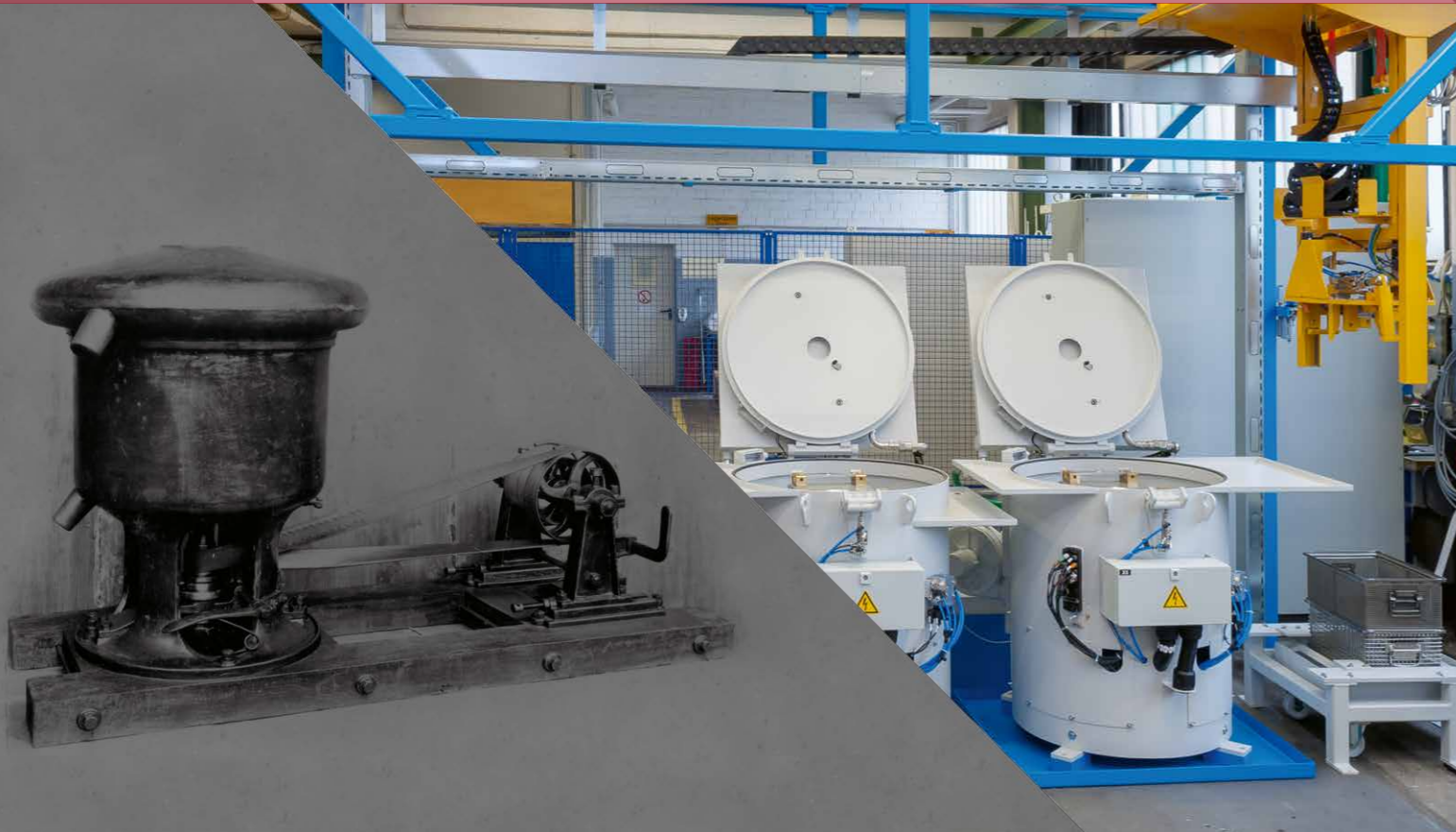


Centrifugal Technology

- ◆ Coolant recovery
 - ◆ Swarf and parts treatment
 - ◆ Centrifuges and swarf crushers





Tradition

Since 1878, Steimel has been developing and producing centrifuges, pumps and machinery in Hennef and continued the fine tradition of family-owned business.

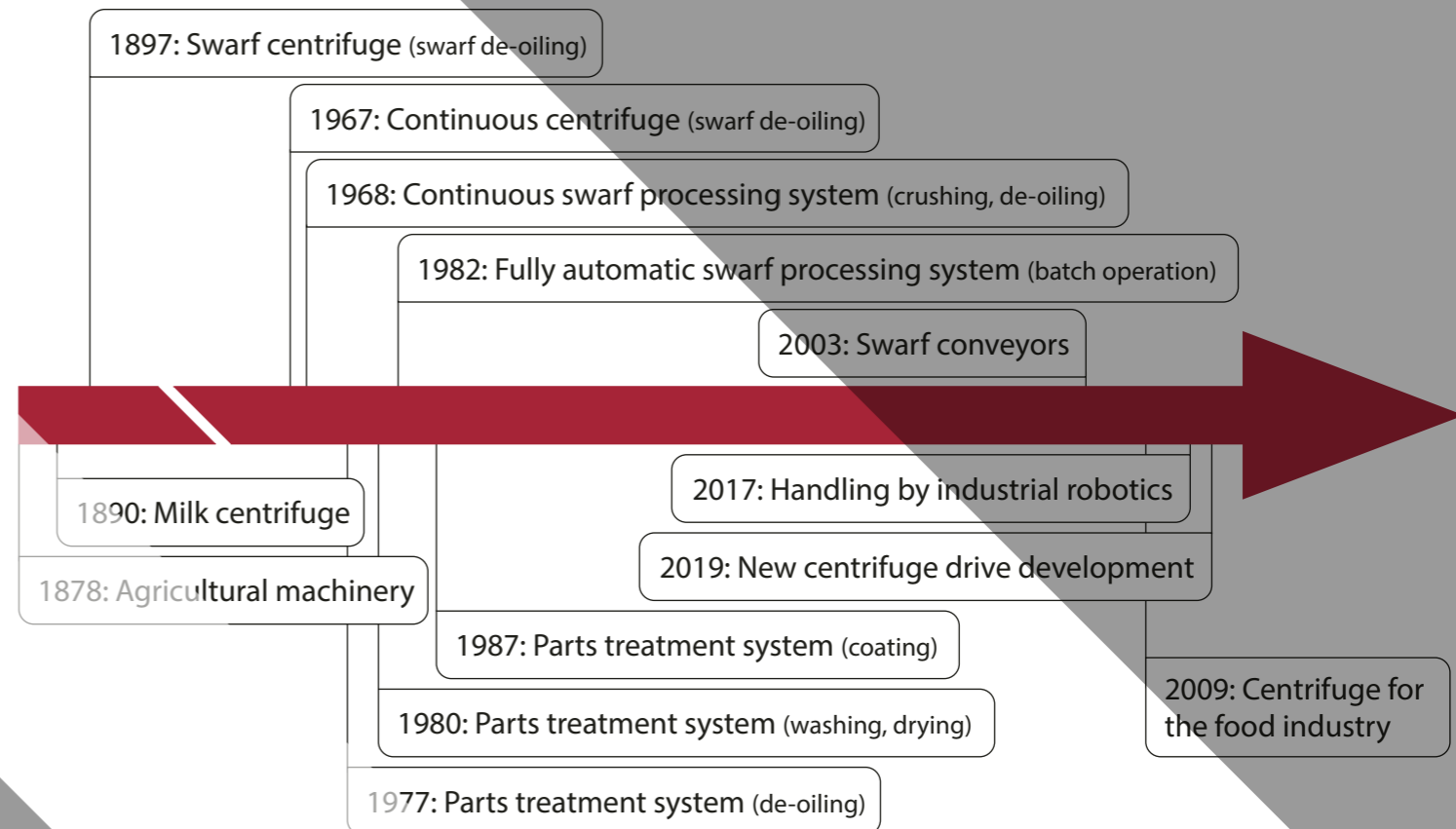
In those early years of rapid industrial expansion in Germany, our first centrifuges were developed for use as milk centrifuges and our first pumps for agricultural use.

Since then, carrying forward its tradition, Gebr. Steimel has become a technologically sophisticated leading manufacturer of pumps, centrifuges and industrial systems.

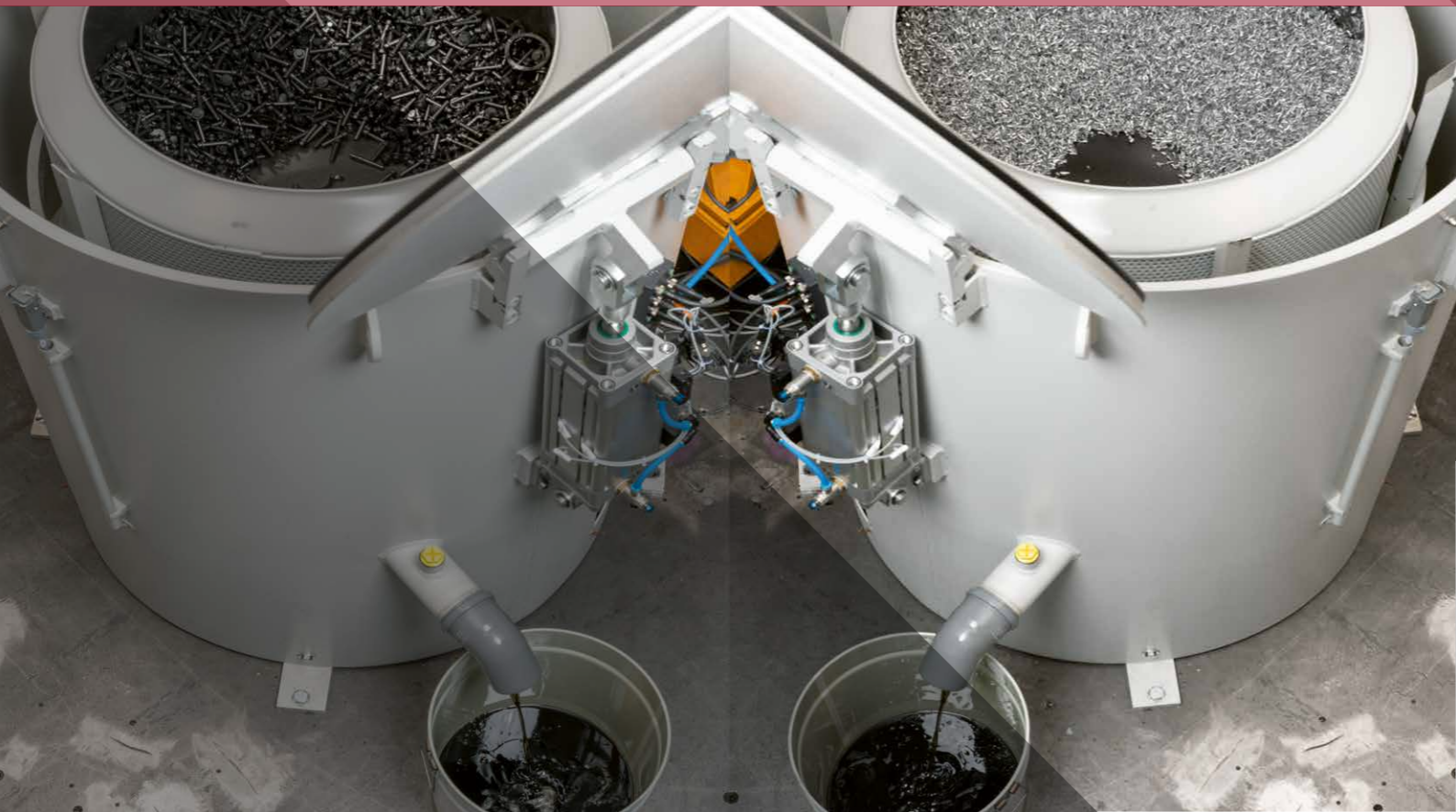
Today

Gebr. Steimel is a reliable partner of renowned international customers in the industry.

- ◆ Coolant recovery
- ◆ Swarf and parts treatment
- ◆ Centrifuges and swarf crushers



- ◆ Project Development
- ◆ Product Engineering
- ◆ Customized Manufacturing
- ◆ Serial Production
- ◆ Product Servicing



Coolant* recovery

Valuable raw materials are recovered with machinery and equipment for the separation of coolant from parts or swarf. The coolant can, after the separation, be returned to the processing machine. A higher price is usually achieved when selling the swarf due to the lower residual moisture. Grade purity and low residual moisture are the most important tasks of a modern and efficient system for coolant recovery in addition to the customized machinery and equipment. Residual moisture below 2% is required and achievable for most swarf types. An oil content of 15-25% in the case of unprocessed swarf and parts shows how quickly the costs for a coolant recovery plant can be amortised.

Applications

- ◆ **Swarf:** Short, long, clustered
- ◆ **Parts:** Bulk material, individual parts
- ◆ **Materials:** Steel, stainless steel, aluminum, brass, cast iron, bronze, copper, tungsten, titanium, molybdenum, and much more

Machinery and systems

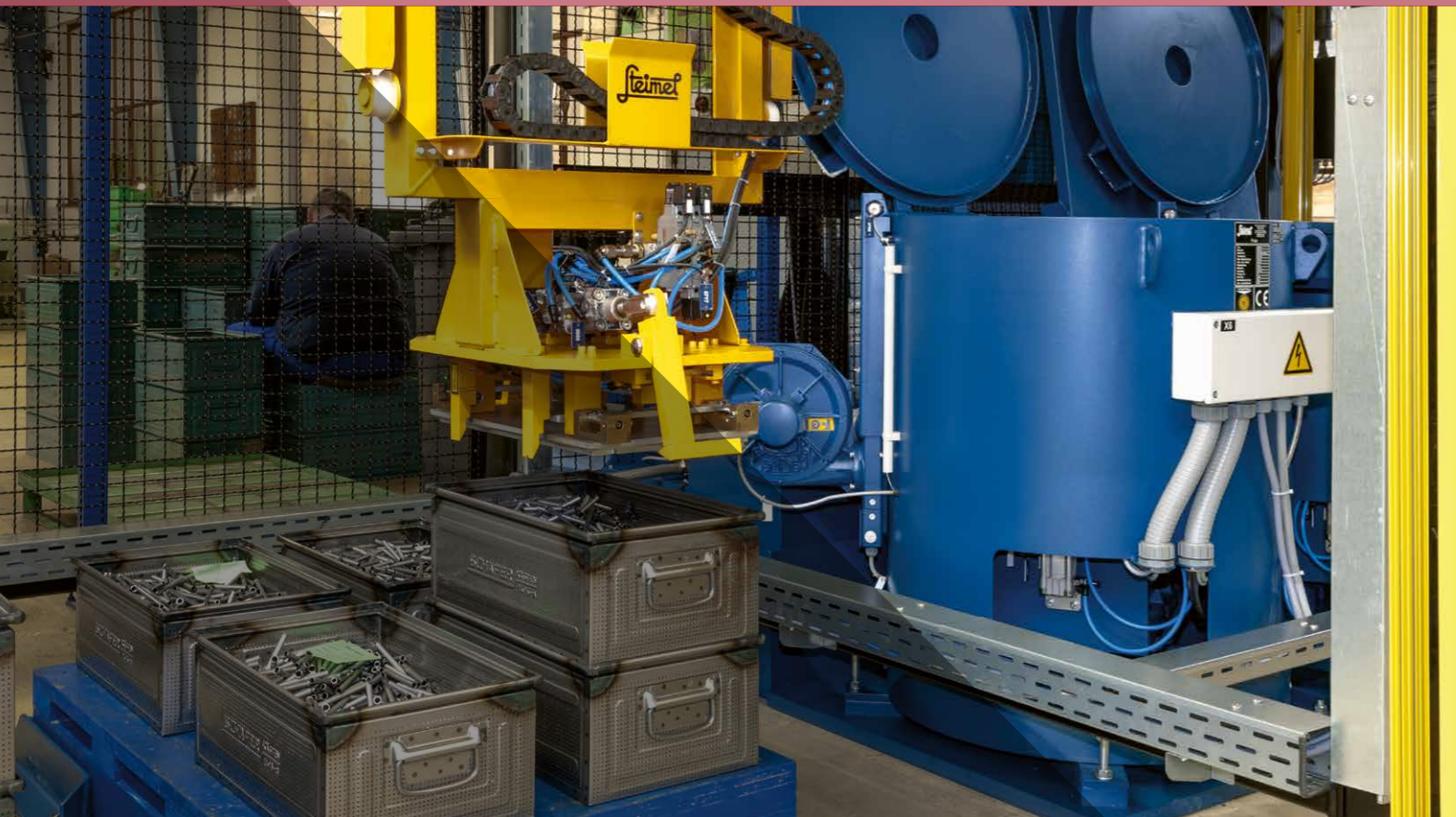
- ◆ **Manual:** Polar RPC, F, FK
- ◆ **Automatic:** Hydro-Polar E, Disk-Polar D, Permolex-Polar K, Robot-Polar RPC, RF, RFK, KRP
- ◆ **Capacity:** 12 l/batch to 10 m³/h, depending on material weight and machine type

Kasten-Robot-Polar in automatic operation			
	2619	Hrs.	28 Min. 00 Sec.
Boxes since last reset	23	Pcs.	Reset
Last reset	07.06.2019 13:36:55		
Total	38929	Pcs.	
Recovered oil			
Since last reset	73790	Litres	Reset
Last reset	23.02.2018 14:03:28		
Total	74069	Litres	
Power consumption			
Since last reset	73072	kWh	Reset
Last reset	23.02.2018 14:05:54		
Total	73972	kWh	



The centrepiece of any coolant recovery system is the centrifuge. This is designed in size and type according to requirements and integrated into the system tailored to customer needs. Manually operated centrifuges for small quantities, continuous or batch-operated centrifuges for medium and large quantities, as well as swarf crushers, conveyor systems and loading systems for containers are included in the extensive product portfolio.

* Coolant = cutting oils and emulsions



Application

- ◆ De-oiling and drying
- ◆ Bulk material in baskets
- ◆ Sensitive parts in washing baskets or perforated boxes
- ◆ Very sensitive parts in special carriers

Machinery and systems

- ◆ **Manual:** Polar RPC, F, FK
- ◆ **Automatic:** Hydro-Polar E, Robot-Polar RPC, RF, RFK, KRP

- ◆ **Capacity:** 12 to 500 l/batch, depending on material weight and machine type.

Tilting centrifuge for scooping parts.



De-oiling and Drying Parts

With machinery and equipment for oil recovery from parts, not only the coolant is recovered for reuse, but due to the very low oil content the parts are fully prepared for onward transport and subsequent machining processes. The lower carryover of coolant can have a positive effect on the lifetime of liquids in washing or vibratory grinding systems.

Parts that come from an electroplating, washing or vibratory grinding system usually have to be separated from process water in order to prepare them for further processing or transport. The oil removal or drying process runs automatically in the machine.

The centrepiece of any equipment for de-oiling or drying is the centrifuge. This is designed in size and type according to requirements and integrated into the system tailored to customer needs. Manually operated centrifuges for small quantities, automatic centrifuges for medium and large quantities, as well as conveyor technology and feeding systems for containers are included in the extensive product portfolio



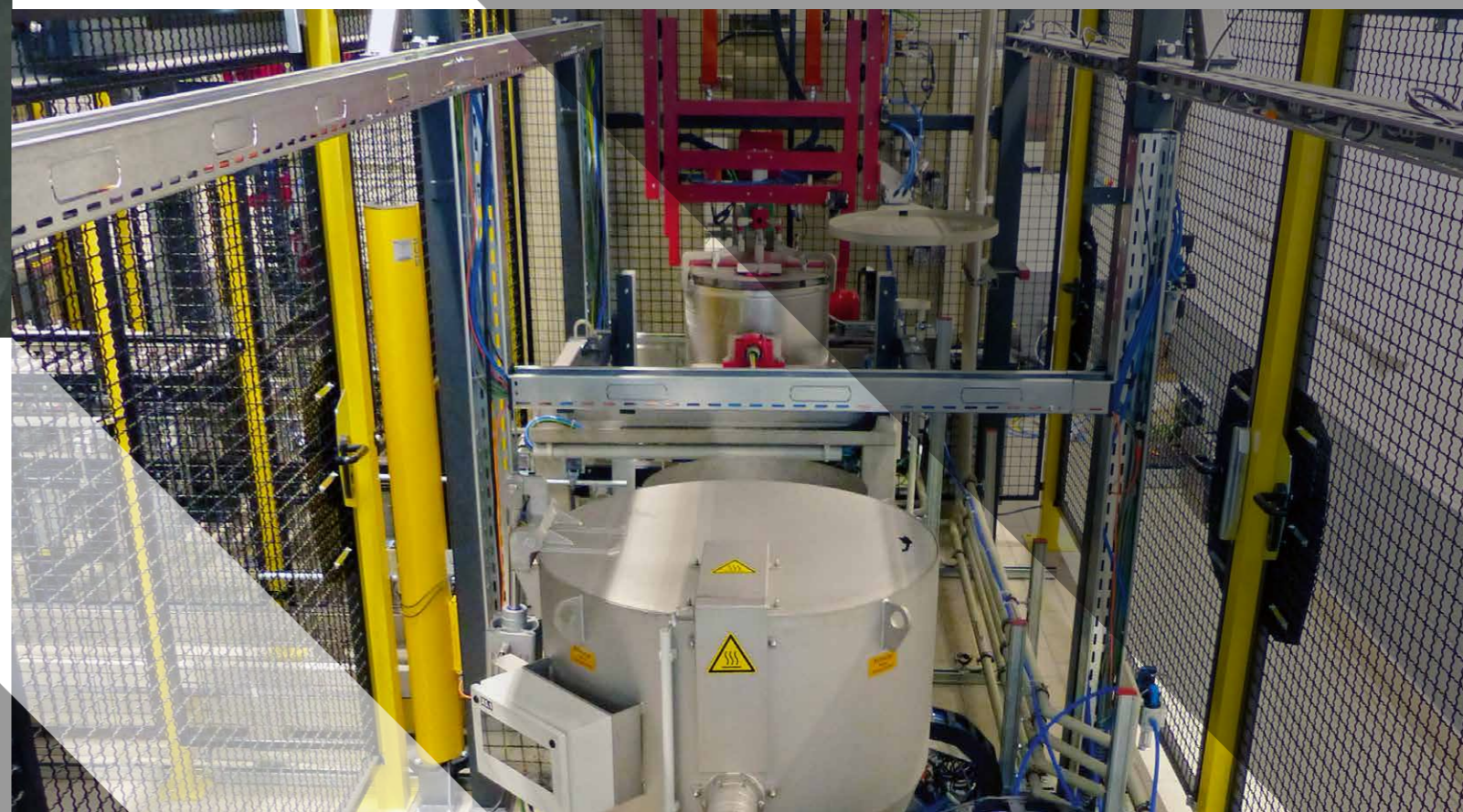


Application

- ◆ Washing and rinsing
 - ◆ in baskets
 - ◆ in special carriers
- ◆ **Materials:** Steel, stainless steel, aluminum, brass, cast iron, bronze, copper, tungsten, titanium, molybdenum, and much more

Machinery and systems

- ◆ **Manual:** Polar RPC, FK
- ◆ **Automatic:** Robot-Polar WK, RFK
- ◆ **Capacity:** up to 100 l/batch, depending on material and machine type



Washing Parts or Swarf

In many cases, oil removal or drying of parts is not enough for subsequent processes. Systems for washing with water-miscible (alkaline) washing-agents ensure the parts are clean and free from oil.

Washing is also becoming more and more important in swarf treatment, since many high-quality and valuable materials have to be free of oil and other foreign substances prior to the melting process. The washing process runs automatically in the machine.

The centrepiece of any equipment for washing parts or swarf is the tilting centrifuge. The product is washed in the tilted centrifuge by circulating and flooding with liquid. The tilting centrifuge is designed in size and type according to requirements and integrated into the system tailored to customer needs. Manually operated tilting centrifuges for small quantities, automatic tilting centrifuges for medium and large quantities, as well as conveyor technology, washing-agent tanks and washing-agent processing are included in the extensive product portfolio.





Application

- ◆ Coating, corrosion protection and painting
- ◆ Bulk material in baskets
- ◆ Sensitive parts in baskets or perforated boxes
- ◆ Very sensitive parts in special carriers

Machinery and systems

- ◆ **Manual:** Polar F, FK
- ◆ **Automatic:** Robot-Polar FK, RFK, ZBL
- ◆ **Capacity:** up to 100 l/batch, depending on the machine type

Tilting centrifuge for scooping parts.



Coating Parts

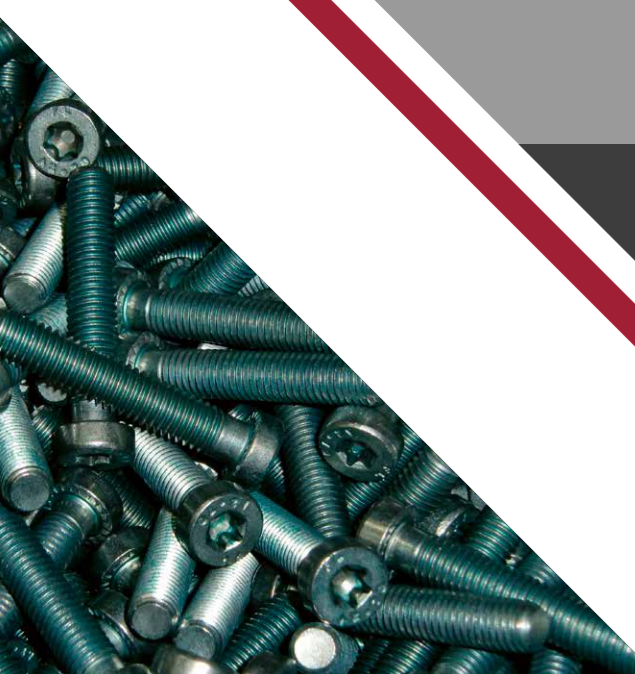
Parts that need to be surface treated after mechanical processing can be treated in centrifuges, depending on the product and the coating.

Our machinery and equipment can be used for painting, corrosion protection and coating with water-soluble coating agents.

Machines in accordance with ATEX, for solvent-based coating agents, are available on request.

The coating process runs automatically in all machines.

The centrepiece of any equipment for coating parts is the centrifuge. The product is coated in centrifuge baskets by flooding and centrifuging. The centrifuge is designed in size and type according to requirements and integrated into the system tailored to customer needs. Manually operated centrifuges for small quantities, automatic centrifuges for medium and large quantities, as well as conveyor, tanks and filter technology, are included in the extensive product portfolio.





Product Groups

- ◆ Manual operating batch centrifuges for parts and/or swarf
- ◆ Automatic operating batch centrifuges for swarf and/or parts
- ◆ Automatic operating continuous centrifuges for swarf
- ◆ Swarf crushers
- ◆ Scraper conveyors

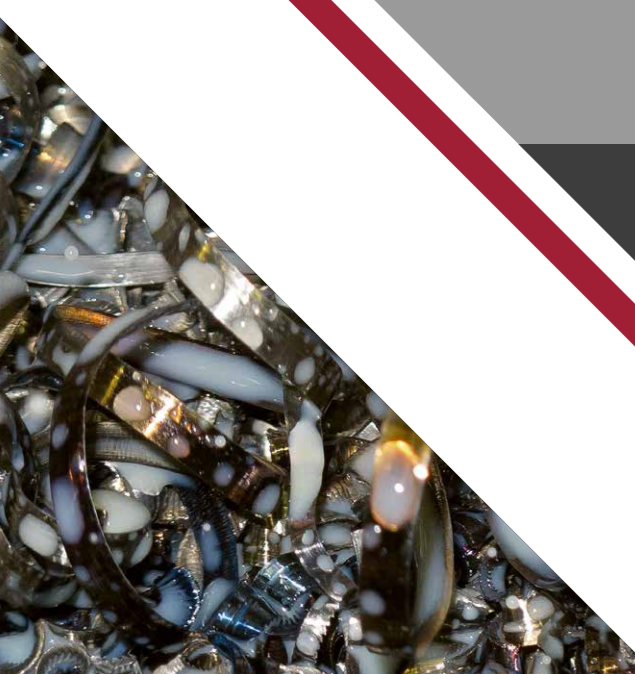


Centrifuges and Swarf Crushers

Our portfolio includes many machines suitable for parts and/or swarf treatment.
Manual operating centrifuges where the centrifuge basket is filled by the operator and placed into the centrifuge.
Centrifuges that are integrated into systems, automatically filled and emptied.
Swarf crushers for crushing long and clustered swarf.
Conveyor technology for swarf, parts and containers.
Control technology for our machinery and equipment.

We not only use these machines in our own plants and for our own customers but we also supply OEMs and plant manufacturers with our products.

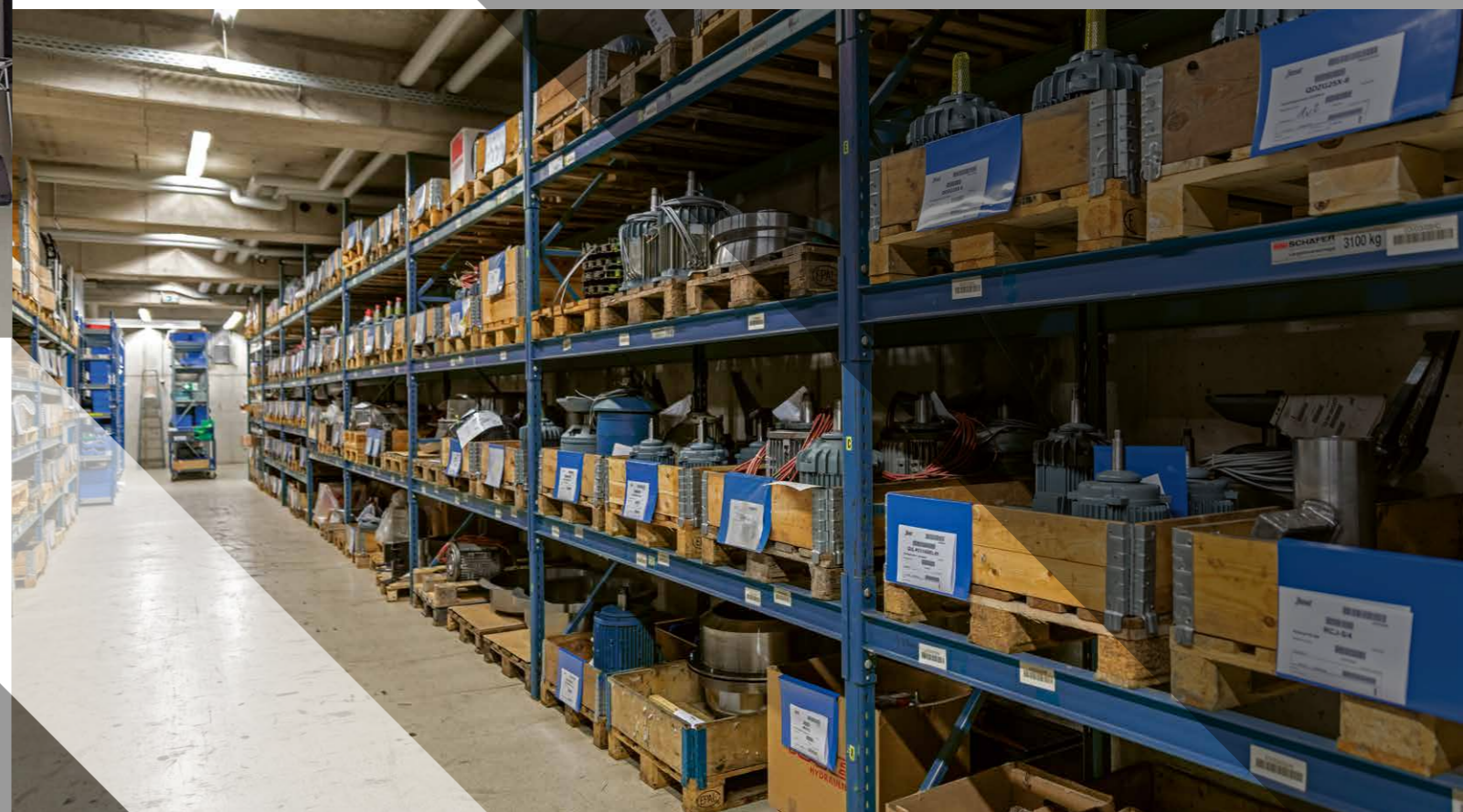
Our Sales and Process Engineering departments work closely with our customers and are prepared to advise.





Our customer services

- ◆ Assembly
- ◆ Commissioning
- ◆ Product training
- ◆ Process monitoring
- ◆ Maintenance
- ◆ Spare parts
- ◆ Repairs



Customer Service

Our customer service around the world cares for the delivered machinery and equipment to ensure our most important goal, the satisfaction of our customers. Assembly, commissioning, maintenance and repairs are carried out by our experienced team. Available spare parts can be delivered and assembled in a short time from stock.

We offer maintenance contracts for our machinery and equipment. These contracts guarantee the annual inspection in accordance with the EC Machinery Directive. Wear is detected early and preventative maintenance can ensure the process reliability of the machines.

Our customer service representatives are available with advice and practical tips. The customer can also receive immediate help by telephone or via the remote maintenance, which is available in most of our automatic systems.

Even for machines, that are over 30 years old, our customer service ensures spare parts availability, maintenance and repair.



Steimel



Steimel worldwide



Europe



Americas



Asia
Australia



Africa

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